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1	Cla	ims
2		
3	1.	A luminescent device comprising a gaseous
4		tritium light source (GTLS) which provides a
5		light output of pre-determinable intensity.
6		
7	2.	A device according to Claim 1, wherein the GTLS
8		comprises 10 to 20 mCi of tritium.
9		
10	3.	A device according to either one of Claims 1
11		and 2, wherein the GTLS is located with an
12		outer casing having at least one optically
13		transparent or translucent portion.
14		
15	4.	A device according to Claim 3, wherein the
16		outer casing is steel.
17		
18	5.	A device according to either one of Claims 3
19		and 4, wherein the transparent or translucent
20		portion comprises a neutral density filter.
21		
22	6.	A device according to any one of Claims 3 to 5,
23		wherein the transparent or translucent portion
24		is formed from glass or plastic.
25		
26	7.	A device according to any one of Claims 1 to 6,
27		wherein the device further comprises colouring
28		means to alter the colour of the light output
29		of the GTLS.

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1	8.	A device according to any one of Claims 1 to 7,
2		wherein the GTLS is held within a housing, the
3		housing being located in the outer casing.
4		
5	9.	A device according to any one of Claims 1 to 8,
6		which is sized and shaped to calibrate the
7		optical output of scientific apparatus.
8		
9	10.	A device according to Claim 9, wherein said
LO		apparatus is a luminometer, a fluorometer, a
L 1		spectrophotometer, a scintillation counter, a
L2		photomultiplier, an avalanche photodiode or a
L3		CCD camera.
L 4		
l.5	11.	A device according to any one of Claims 1 to 8,
L6		wherein said device comprises a scalebar
L 7		graticule.
L8		
L9	12.	A device according to any one of Claims 1 to 8,
20		wherein said device comprises a filter array.
21		
22	13.	A kit comprising two or more luminescent
23		devices according to any one of Claims 1 to 12,
24		each said device providing a light output of a
25		distinct intensity to the other devices of said
26		kit.
27		
28	14.	A kit according to Claim 13, further comprising
29		a magnetic handling tool and wherein each said
30		device includes a magnetic component.

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1	15.	A kit according to either one of Claims 12 and
2	•	13, comprising three or more devices, each
3		having a light output of a distinct intensity
4		to the other devices of said kit.
5		
6	16.	A light measuring apparatus comprising a
7		luminescent device as claimed in any one of
8		Claims 1 to 12, housed in a sample holder of
9		said apparatus.
10		
11.	17:	An apparatus as claimed in Claim 16, which is a
12		luminometer, a fluorometer, a
13		spectrophotometer, a scintillation counter, a
14		photomultiplier, an avalanche photodiode or a
15		CCD camera.
16		
17	18.	A method of analysing a sample, said method
18		comprising;
19		i) calibrating an apparatus able to detect
20		light output using a device as claimed in
21		any one of Claims 1 to 12;
22		ii) inserting said sample into the calibrated
23		apparatus and obtaining a reading
24		therefore.
25		
26	19.	A method as claimed in Claim 18, wherein the
27		sample comprises living cells.